

*Am - Fed Instruments**SO  
4/18/61*

25X1

April 14, 1961

*av - Q26  
Joe - [unclear]  
Ralph [unclear]  
Walt [unclear]  
Dalk [unclear]*

Dear Sir:

This letter report summarizes the research performed under Task Order No. RR during January, 1961.

Fabrication of the top (combustion-chamber) section and the shells of the motor-blower-assembly compartments was carried as far as possible without the blowers and motors being available. After drawings of the blowers were received from the manufacturer, layout drawings for use in fitting the blowers into their compartments were prepared.

After several additional discussions with motor and blower manufacturers regarding the operation of a dual-frequency single-phase motor, it appears that the General Electric Company will probably be able to supply a 50-cycle motor which will be guaranteed to operate satisfactorily on either 50- or 60-cycle current in this application. The Buffalo Forge Company subsequently set a tentative shipping date of March 2 for a 17MW blower equipped with a three-phase motor, and March 10 - 15 for a similar blower with a single-phase motor.

Allen-Bradley manual starting switches with overload protection are available for motors up to 5 hp. Such switches do not have holding coils to provide undervoltage protection and can, therefore, be used interchangeably for 50- and 60-cycle power. Since each of the two above-mentioned motors is suitable for operation at two different voltages, two sets of heater elements will be supplied with each starter to permit adaptation to operation at



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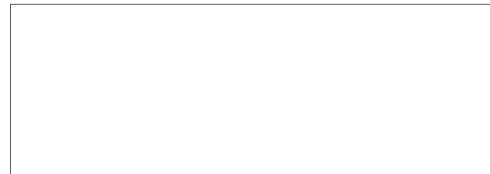
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either 110 or 220 volts. The single- and three-phase motors and starters for the Model 2 incinerators will therefore be set up for immediate switching between 50- and 60-cycle current, without any need for changing electrical components or circuit connections except for the insertion of the appropriate heater elements.

After the blowers and motors arrive, they will be installed in the appropriate compartments and the air throttles will be assembled to the two lower-section units. Burning experiments will then be conducted, with primary emphasis on the evaluation of the incinerator lower section equipped with the three-phase motor and blower assembly.

The total appropriation on this Task Order was \$29,648. As of February 1, 1961, the unexpended balance was approximately \$400. It is planned that a proposal will be submitted in February to provide additional time and funds for this program.

Sincerely,



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ABW:mlm

In Duplicate